Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 10, canceled.
- 11. (Currently Amended) A method of encoding a watermark in a digital signal, the method comprising:

generating varying key bits; and

encoding the varying key bits in the digital signal as a watermark with reference to at least characteristics of the digital signal.

12. (Currently Amended) A method of steganographically encoding bits in a digital signal, the method comprising:

generating varying key bits; and

steganographically encoding the digital signal using the varying key bits.

13. (Currently Amended) A method of encoding a watermark in a digital signal, the method comprising:

mapping key information to effect an encode/decode map; and

encoding the watermark in the digital signal using the encode/decode map and characteristics of the digital signal.

- 14 15. canceled.
- 16. (Currently Amended) A method of generating a noise signal to produce watermark information, <u>the method</u> comprising:

generating a noise signal as a function of at least one variable which depends on key and processing state information; and

providing the generated noise signal as watermark information.

- 17 62, canceled.
- 63. (Currently Amended) A system for encoding a watermark in a digital signal, the system comprising:
 - a generator configured to generate for generating a pseudo-random key; and
- an encoder <u>configured to encode for encoding</u> a watermark in the digital signal using: i) the pseudo-random key; and ii) characteristics of the digital signal.
- 64. (Previously Presented) The system of claim 63, wherein the generator is selected from a non-linear generator or a scrambling generator.
- 65. (Previously Presented) The system of claim 63, wherein the characteristics of the digital signal comprise mathematically defined functions of the digital signal.
- 66. (Currently Amended) A system for encoding a watermark in a digital signal, the system comprising:
- a processor <u>configured to</u>: [[i) to]] map pseudo-random key and processing state information to effect an encode/decode map; and [[ii) to]] encode a watermark in [[a]] <u>the</u> digital signal using the encode/decode map and characteristics of the digital signal.
- 67. (Currently Amended) The system of claim 66, wherein the <u>processor maps the</u> <u>pseudo-random key and processing state information to effect an encode/decode map using generator is selected from a non-linear generator or a scrambling generator.</u>

68. (Previously Presented) The system of claim 66, wherein the characteristics of the digital signal comprise mathematically defined functions of the digital signal.

69 - 133 canceled

- 134. (Currently Amended) The method of claim 11, wherein the digital signal represents audio, imagery or video.
- 135. (Currently Amended) The method of claim 12, wherein the digital signal represents audio, imagery or video.
- 136. (Currently Amended) The method of claim 13, wherein the digital signal represents audio, imagery or video.
- 137. (Currently Amended) The system of claim 63, wherein the digital signal represents audio, imagery or video.
- 138. (Currently Amended) The system of claim 66_a wherein the digital signal represents audio, <u>imagery</u> or video.
- 139.(New) A tangible computer-readable medium having instructions stored thereon, the instructions comprising:

instructions to generate varying key bits; and

instructions to encode the varying key bits in a digital signal as a watermark with reference to at least characteristics of the digital signal.

140. (New) A system comprising:

a generator configured to generate varying key bits; and

an encoder configured to steganographically encode a digital signal using the varying key bits.

141. (New) A tangible computer-readable medium having instructions stored thereon, the instructions comprising:

instructions to generate varying key bits; and

instructions to steganographically encode a digital signal using the varying key bits.

142. (New) A tangible computer-readable medium having instructions stored thereon, the instructions comprising:

instructions to map key information to effect an encode/decode map; and

instructions to encode a watermark in a digital signal using the encode/decode map and characteristics of the digital signal.

143. (New) A system comprising:

a generator configured to generate a noise signal as a function of at least one variable which depends on key and processing state information; and

a provider configured to provide the generated noise signal as watermark information.

144. (New) A tangible computer-readable medium having instructions stored thereon, the instructions comprising:

instructions to generate a noise signal as a function of at least one variable which depends on key and processing state information; and

instructions to provide the generated noise signal as watermark information.